# PATENT ABSTRACTS OF JAPAN

(11)Publication number:

2001-269381

(43) Date of publication of application: 02.10.2001

(51)Int.CI.

A61H 15/00 A61H 7/00 H04M 11/00

(21)Application number: 2000-087853

(71)Applicant: SANYO ELECTRIC CO LTD

(22)Date of filing:

28.03.2000

(72)Inventor: ABE ISAMU

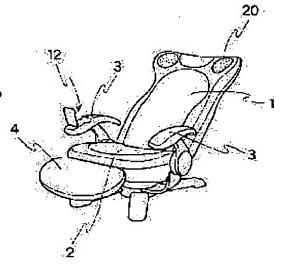
WADA TETSUO

TSUCHIDA HIROKO

### (54) MASSAGER AND MASSAGING METHOD AND SYSTEM USING IT

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a massager capable of giving massages by use of a network according to the condition of a person to be massaged. SOLUTION: A massaging system includes a drive mechanism for driving a massaging part which massages the person to be massaged, and an interface part capable of transmitting and receiving communications to and from an external information management part.



#### **LEGAL STATUS**

[Date of request for examination]

22.12.2003

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]



Copyright (C); 1998,2003 Japan Patent Office

THIS PAGE BLANK (USPTO)

#### **CLAIMS**

#### [Claim(s)]

[Claim 1] -ed -- free medical treatment -- the massage machine equipped with the \*\* interface section transmit a communication link mutually between the drive which drives the massage section which massages a person, and the external Research and Data Processing Department.

[Claim 2] it is the massage approach using a massage machine according to claim 1, and said massage machine is used ——ed ——free medical treatment ——the massage approach that a person transmits the optimal massage program for current condition information to said massage machine through a network in said Research and Data Processing Department based on delivery and the sent condition information concerned through a network, and makes said drive drive based on the transmitted signal concerned.

[Claim 3] The massage approach according to claim 2 by which said optimal massage program is set up by the Research and Data Processing Department based on said sent condition information.

[Claim 4] The massage approach according to claim 2 by which said optimal massage program is automatically set up based on said sent condition information.

[Claim 5] said optimal massage program — memorizing — the contents — ed — free medical treatment — the massage approach according to claim 2 by which the performed information is memorized by the Research and Data Processing Department while enabling it to perform by a person reading.

[Claim 6] The massage approach according to claim 4 chosen automatically [ when / said / set up automatically ] out of two or more programs prepared beforehand.

[Claim 7] the case where it sets up automatically with the case where the Research and Data Processing Department sets up said optimal massage program -- -ed -- free medical treatment -- the massage approach according to claim 3 or 4 of distinguishing between a person's use tariff.

[Claim 8] With a massage machine according to claim 1 and the Research and Data Processing Department established in the exterior of this massage machine The network which connects said massage machine and Research and Data Processing Department so that it can communicate mutually is included. said massage machine is used — — ed —— free medical treatment —— a person —— said network —— minding —— current condition information —— said Research and Data Processing Department ——

delivery — The massage system which the optimal massage program is transmitted [ system ] to said massage machine through a network, and makes said drive drive based on the transmitted signal concerned based on the sent condition information concerned.

### **DETAILED DESCRIPTION**

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the massage approach and massage system which use a massage machine and it. further — detailed — a network — using — — ed —— free medical treatment —— it is related with the massage approach and massage system using the massage machine which can perform the therapy doubled with a person's condition, and it.

[0002]

[Description of the Prior Art] the former -- -ed -- free medical treatment -- there are massage machines, such as a chair type and a bed mold, as equipment which massages to the affected parts, such as a person's shoulder and the waist. for example, -- -ed -- free medical treatment -- the interior of the section is equipped with \*\*\*\* of a pair per [ which a person's back hits ] back, and there is a massage machine which is made to drive this \*\*\*\* by the motor and could be made to carry out a rolling massage in the direction of the waist from the crest (refer to Provisional-Publication-No. No. 253060 [ 62 to ] official report).

[0003] this massage machine — the drive time amount of said \*\*\*\*, the direction of \*\*\*\* of operation, etc. — ed — free medical treatment — it is beforehand set up according to the timer, the device of operation, etc. regardless of a person's condition. [0004] for this reason — ed — free medical treatment — according to condition, arrangement of \*\*\*\* cannot be changed, or a person cannot rub, cannot make a change of operation etc., and cannot undergo the optimal massage therapy.

[0005] this invention — an above-stated situation — taking an example — a network — using — ed — free medical treatment — it aims at offering the massage approach and massage system using the massage machine which can perform the therapy doubled with a person's condition, and it.

[0006]

[Means for Solving the Problem] the massage machine of this invention -- -ed -- free

medical treatment — it is characterized by having the \*\* interface section transmit a communication link mutually between the drive which drives the massage section which massages a person, and the external Research and Data Processing Department.

[0007] moreover, the massage approach of this invention is the massage approach of using a massage machine according to claim 1, and said massage machine is used for it ——ed ——free medical treatment ——it is characterized by for a person to transmit the optimal massage program to said massage machine through a network based on delivery and the sent condition information concerned in said Research and Data Processing Department for current condition information through a network, and to make said drive drive based on the transmitted signal concerned.

[0008] Furthermore, the massage system of this invention A massage machine according to claim 1, The network which connects the Research and Data Processing Department established in the exterior of this massage machine, and said massage machine and Research and Data Processing Department so that it can communicate mutually is included, said massage machine is used ——ed ——free medical treatment —— a person —— said network —— minding —— current condition information —— said Research and Data Processing Department —— delivery —— Based on the sent condition information concerned, the optimal massage program is transmitted to said massage machine through a network, and it is characterized by making said drive drive based on the transmitted signal concerned.

### [0009]

[Embodiment of the Invention] Hereafter, based on an accompanying drawing, the massage approach and massage system using a massage machine and it of this invention are explained.

[0010] The perspective view showing the chair type massage machine in connection with the gestalt of 1 operation of this invention in  $\underline{\text{drawing 1}}$ , The important section sectional view of a chair type massage machine [ in / in  $\underline{\text{drawing 2}}$  /  $\underline{\text{drawing 1}}$ ], drawing where  $\underline{\text{drawing 3}}$  explains actuation of the massage machine in  $\underline{\text{drawing 1}}$ , the perspective view showing the chair type massage machine in connection with the gestalt of other operations of this invention in  $\underline{\text{drawing 4}}$ , the perspective view showing the chair type massage machine further in connection with the gestalt of other operations of  $\underline{\text{drawing 5}}$  this invention, and  $\underline{\text{drawing 6}}$  —  $\underline{\text{drawing 1}}$  — it is an example of the flow chart of the chair type massage machine to kick.

[0011] As shown in <u>drawing 1</u> -2, the chair type massage machine in connection with the gestalt of 1 operation of this invention -ed -- free medical treatment -- per

[ which a person's back hits ] back -- the section 1 -- -ed -- free medical treatment -- with the seat 2 on which a person sits -ed -- free medical treatment -- the armrest section 3 which carries a person's elbow -- -ed -- free medical treatment -with \*\*\*\* 5 of the pair which is the massage section built in the chair which consists of the stirrup-clip section 4 on which a person puts a guide peg in the direction of four directions per said back at the section 1 The drive 6 to which this \*\*\*\* 5 is moved along the longitudinal direction and the cross direction of the section 1 per back, and the control means which controls this drive 6 based on the optimal massage program are built in. Said drive 6 consists of rise-and-fall means 7, such as a ball-thread unit which moves \*\*\*\* 5 to a longitudinal direction, and both-way means 8, such as a gear unit which carries out both-way migration of the spacing of \*\*\*\* 5 in the direction made to extensive-\*\*\*\*\*. Moreover, while said \*\*\*\* 5 and both-way means 8 are connected by the arm 9 of a link mechanism, the bottom frame 10 is connected with the reclining device 11, and it enables it to rock the section 1 to the seat 2 per back. [0012] What consists of the control unit 12 prepared in said armrest section 3, the interface section by which internal organs are carried out, the memory section, and the data-processing section as said control means can be used. The receiving microphone for voiceprint authentication is built in the control unit 12.

[0013] It enables it to connect with the network constituted by a health service firm, a medical institution, etc. connecting through the home gateway in a wireless LAN (Local Area Network) system with the gestalt of this operation, from the control unit 12 using the interface section of the voice interactive mode with which a chair is equipped, as shown in drawing 3. therefore -- while conversing with the masseur of the health adviser who is in a health service firm, for example, a pro, via a network on the screen of the control unit 12 with which a chair is equipped -- -ed -- free medical treatment -- memory is carried out to the individual massage program software to which condition information, such as a person's current condition and a request to a massage, is assigned by the server of a health service firm with \*\*\*\*\* at the masseur. Thereby, since the optimal massage program to an individual is set up by the masseur of a health service firm, the optimal massage therapy can be undergone. moreover -- said individual massage program software -- serially -- -ed -- free medical treatment -- since memory of a person's condition information is carried out -- -ed -- free medical treatment -- a person's use hysteresis is saved. as said optimal massage program -- for example -- beforehand -- -ed -- free medical treatment -- it is suitably set up using the information on the therapy request to the corporal feeling sensed during the therapy request before a therapy, or a therapy with the corporal information sensed by the everyday life of the stiffness of the shoulders, low back pain, etc. which are a person's condition information etc. In addition, it can replace with the interface section of said voice interactive mode, and the interface section of a liquid crystal touch panel method can be used.

[0014] In addition, in this specification, the I/O device which the Research and Data Processing Department has in the exterior of a massage machine, and is the thing of the device which exchanges information between the massage machines concerned, or carries out informational processing or informational storage, is inputted by the server, memory, and Research and Data Processing Department side, or is outputted (display) is contained.

[0015] With the gestalt of this operation, although the optimal massage program to an individual is set up by the health service firm (masseur), this optimal massage program can also be automatically set up based on said sent condition information. Thus, when setting up automatically, it can choose automatically out of two or more programs prepared beforehand.

[0016] in addition — — ed —— free medical treatment —— when setting up automatically with the case where a health service firm sets up the optimal massage program, to a person and enabling it to choose, distinguishing between a use tariff is desirable.

[0017] moreover, the optimal massage program — memorizing — the contents — ed — free medical treatment — while enabling it to perform by a person reading, the performed information can also make a health service firm memorize When computing a use tariff at this time, while being able to use this information, it can use, even when a health service firm is closed.

[0018] In addition, with the gestalt of this operation, although the input of condition information is performed by the receiving microphone for voiceprint authentication, in this invention, it is not limited to this and the key input of a control unit can perform. [0019] Moreover, in this invention, although read of personal authentication is performed by the voiceprint, the chair of the gestalt of this operation can attest an individual by establishing the hole 13 for fingerprint authentication in the armrest section 3, and inserting a finger in this hole 13, as shown in drawing 4 instead of \*\* limited to this. Or as shown in drawing 5, an individual can also be attested by forming a card reader 14 in the armrest section 3, and inserting ID card 15 in this card reader 14.

[0020] With the gestalt of this operation, except when massaging for at most 30 minutes for one day, it can use as an ordinary chair. In this case, by carrying a pillow speaker 20, as shown in <u>drawing 1</u> and <u>drawing 3</u>, music can be listened to and relaxed

calmly or TV voice can also be enjoyed about its ears.

[0021] Moreover, when weight is measured only by building the scale in a chair and sitting on it as an accessory, or a medical measuring instrument is built in the armrest section or other armrest sections which prepared the control unit and a finger is put into the hole, it can make it possible to check body fat etc. to blood pressure, a pulse, and a pan. They are accumulated as individual data and can also display easy health advice on the screen of a control unit from the past hysteresis etc. The direct advice by the dialogue with a family doctor can also make it possible for this to also receive the data in reference by accessing a medical institution, as shown in drawing 3. Furthermore it can connect also with a manufacturer service firm, and maintenance check can also be requested.

[0022] Actuation of the massage machine in connection with <u>drawing 1</u> is explained based on <u>drawing 6</u> below.

[0023] If a massage machine is purchased first, member registration will be carried out to a health service firm. the contents register the physique information for every users (-ed -- free medical treatment -- a person) A, B, and C which use the massage machine.

[0024] Now, the case where User C uses it is explained. The waist in which current condition, for example, a shoulder, is fastidious is painful, and a user inputs the condition of feeling languid and getting tired, that it cannot sleep, wanting to refresh with voice from a control unit, and transmits the condition information to a health service firm. a health service firm — the object for the stiffness of the shoulders etc. — the basic massage program is prepared several kinds beforehand.

[0025] The condition information sent by User C is judged, and while choosing the massage program of the base suitable for it, User's C ID is recognized, the physique information (seated height, breadth of its shoulders, etc.) registered into User's C server is read, the massage program of said selected base is corrected to the program suitable for the physique, and it transmits to a massage machine. The contents of this correction program are the vertical location of \*\*\*\*, and physical relationship on either side. In addition, the program corresponding to directions is chosen and combined automatically, and correction may be added to said correction program with reference to physique data, use hysteresis, etc.

[0026] In a massage machine side, while carrying out memory of the program, data processing of the contents is carried out, \*\*\*\* is driven, and a massage is performed. [0027] User's C being stronger and the contents of the program in which memory is carried out by it if the request of the upper one etc. is advanced more come to be

corrected during massage activation.

[0028] If a massage program is corrected, since a user's use hysteresis is saved, the performed contents [finishing / the correction] are sent to User's C server.

[0029] If the condition information is transmitted to a health service firm when a user next uses a massage machine in the same condition, the program which is immediately saved to the server and which was last time the optimal will be read, and it will be performed. Therefore, the massage for which it was suitable with the present condition can be performed.

[0030] In a health service firm side, it transmits related information (the prevention approach, a special medical institution, etc. of the stiffness of the shoulders) by the Internet, and it not only transmits a massage program, but can see on the screen of the control unit of a massage machine.

[0031] A health service firm side may be equipped with the memory and the processing unit in a massage machine side. The massage machine should be equipped only with the transceiver function if it does in this way.

[0032] In addition, with the gestalt of this operation, although the chair type massage machine was explained, in this invention, it is not limited to this and can apply also to a bed mold or the massage machine only for guide pegs.

[0033]

[Effect of the Invention] According to this invention, the therapy doubled with individual condition can be performed using a network as explained above.

#### DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the perspective view showing the chair type massage machine in connection with the gestalt of 1 operation of this invention.

[Drawing 2] It is the important section sectional view of the chair type massage machine in drawing 1.

[Drawing 3] It is drawing explaining actuation of the massage machine in drawing 1.

[Drawing 4] It is the perspective view showing the chair type massage machine in connection with the gestalt of other operations of this invention.

[Drawing 5] It is the perspective view showing the chair type massage machine further in connection with the gestalt of other operations of this invention.

[Drawing 6] drawing 1 — it is an example of the flow chart of the chair type massage

## machine to kick.

# [Description of Notations]

- 1 It is Section per Back.
- 2 Seat
- 3 Armrest Section
- 4 Stirrup-Clip Section
- 5 \*\*\*\*
- 6 Drive
- 7 Rise-and-Fall Means
- 8 Both-way Means
- 9 Arm
- 10 Bottom Frame
- 11 Reclining Device
- 12 Control Unit